

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-----------------------|----------------------------------|----------------------|---------------------|-----------------|
| 10/027,464 12/20/2001 | | Sheila J. Kelly | 1416.07US01 | 1559 |
| 27367 | 7590 03/08/2006 | EXAMINER | | |
| | CHAMPLIN & KELI | WITZ, JEAN C | | |
| ~~~~ | INTERNATIONAL CI AVENUE SOUTH | ART UNIT | PAPER NUMBER | |
| MINNEAPOL | IS, MN 55402-3319 | | 1651 | |

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | A | pplication No. | Applicant(s) | | | | |
|--|--|--|------------------------|---|--------|--|--|--|
| | | | 0/027,464 | KELLY ET AL. | | | | |
| Office Action Summary | | | xaminer | Art Unit | | | | |
| | | ĺ | ean C. Witz | 1651 | | | | |
| _ | - The MAILING DATE of this commun | | | | dress | | | |
| Period fo | | • • | | • | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | | | | | |
| 1)⊠ | Responsive to communication(s) file | ad on 20 Augu | st 2006 and 01 Decembe | or 0005 | | | | |
| | Responsive to communication(s) filed on <u>29 August 2006 and 01 December 0905</u> . This action is FINAL . 2b) This action is non-final. | | | | | | | |
| / | ,— | | | | | | | |
| <i>,</i> — | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| | · | --- | | ., | | | | |
| | on of Claims | | | | | | | |
| | Claim(s) <u>1-40</u> is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) <u>28-40</u> is/are withdrawn from consideration. | | | | | | | |
| · — | Claim(s) is/are allowed. | | | | | | | |
| | ☐ Claim(s) <u>1-6,9-15,17-21 and 24-27</u> is/are rejected. | | | | | | | |
| | Claim(s) <u>7,8,16,22 and 23</u> is/are objected to. | | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | | |
| Application | on Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| | nder 35 U.S.C. § 119 | • | | | | | | |
| _ | • | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| 2) 🔲 Notice 3) 🔲 Inform | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (Fation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date | | | nmary (PTO-413) fail Date mal Patent Application (PTO | 9-152) | | | |

Application/Control Number: 10/027,464

Art Unit: 1651

DETAILED ACTION

Page 2

Election/Restrictions

1. Applicant's election with traverse of the invention of Group I, claims 1-28, and the species of elastin in the replies filed on August 29 and December 9, 2005 is acknowledged. The traversal is on the ground(s) that examination of the extra invention would not be a burden. This is not found persuasive because the composition does not require any given method of fastening and is not required by the composition claims; therefore, a reference directed towards the composition would not anticipate or render obvious the claims to the method.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 28 (drawn to a non-elected species) and 29-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 10/027,464

Art Unit: 1651

4. Claims 1-2, 4, 6, 11-13, 17-18, 20-21, 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,773,723 to Spiro et al.

Page 3

The claims recite a composite matrix of a first and second layer. The first layer has at least about 5% dry weight of a flexibility modifying agent and a second layer having at least about 5% less of the flexibility modifying agent.

U.S. Patent 6,773,723 to Spiro et al. teaches a bi-layer matrix composed of a 70% collagen/30% hyaluronic acid layer and a 100% hyaluronic acid layer. Therefore, the 100% HA layer has at least 5% flexibility modifying agent and the 70%COL/HA layer has at least 5% less of the flexibility modifying agent because it has approximately 30% HA. The layers can be crosslinked, and growth factors and cells can be incorporated into the layers. Collagen is found in the second layer and is an cellular attachment compound for fibroblast precursor cells or for vascular endothelial precursor cells. The method of preparation indicates that the layers inherently have thickness of at least about 25 microns.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

Art Unit: 1651

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3, 5, 9-10, 14-15, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,773,723 to Spiro et al.

Claims drawn to the specific amounts of collagen in the various layers are deemed optimizable parameters well within the skill of the practitioner since the patent teaches that various COL/HA ratios may be produced and various polymeric substances may be included in each layer. One of ordinary skill in the art would be aware of the importance of each component in each layer and would expect specific features from varying amounts of components. Similarly, determining layers of any given thickness is deemed well within the skill of the practitioner. Further, the source of collagen is a conventional source of collagen for matrix implants.

Allowable Subject Matter

8. Claims 7-8, 16 and 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1651

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean C. Witz whose telephone number is (571) 272-0927. The examiner can normally be reached on 6:30 a.m. to 4:00 p.m. M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jéan C. Witz Primary Examiner Art Unit 1651